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October 28, 2009

US EPA Region 10
Attn: PCS Data Entry Team
1200 Sixth Avenue, OCE-133
Seattle, WA 98101

Re: NPDES Permit # ID002803-7

Dear Sir or Madam:

This report is submitted to comply with the requirements of Part II.B Table 3 of the referenced permit. Please find attached:

1. Source Investigation
2. Receiving water fate and transport study
3. Report of Findings and Recommendations, which includes the results of our feasibility evaluation at this time and the efforts currently being made to meet the Schedule of Compliance for Total Phosphorus.

Sincerely,

A handwritten signature in blue ink that reads "John Prigge".

John Prigge
Wastewater Manager
Sorrento Lactalis, Inc
(208) 463-6610
(208) 860-9487 Cell

10/31/09
A. 11/4/09

Sorrento Lactalis, Inc.

Nampa, Idaho 83687

Permit No.: ID-002803-7

Attachment 1 - Source Investigation of Total Phosphorus

1. In 2008, 47% of total phosphorus loading to the wastewater treatment plant was from phosphoric-based cleaning chemicals, which generated approximately 33,364.67 lbs phosphorus on an annual basis. Data was provided from our bulk chemical supplier Ecolab Inc. Information was based on percentage of phosphorus per pound basis. In 2009, our chemical supplier was changed to Johnson-Diversey while the Ecolab products were phased out. Eventually, the majority of the phosphoric-based cleaning chemicals were replaced with other chemicals and we are now at just 6% of the 2008 phosphoric-based chemical levels(i.e. phosphoric-based cleaning chemicals now make up just 3% of total phosphorus loading).
2. Another source of phosphorus is from cheese and whey production, equipment cleaning and small trace amounts from other sources. One liter of milk contains 1000 mg/l of phosphorus. Sorrento processed approximately 151,000,000 gallons of milk in 2008 and will process only slightly less than this in 2009.
3. We are testing the well water for phosphorus as well. Our process lab has had test results as high as 0.12 mg/l on tap water using Hach test tube method 8190 on a DR-4000. We will test the well water at a certified lab and use EPA standard methods 365.4. to build a database on a monthly testing schedule.

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Attachment 2 - Receiving Water Fate And
Transport Study
Report of Findings

1. The wastewater treatment facility has had an average Total Phosphate discharge of 0.172 mg/l as P. calculated from November 1, 2008 through October 2009 to the receiving water. Tests were done on daily and monthly basis. Test were completed by an outside certified lab using the EPA Method 365.1.
2. Quarterly testing for the same time period were performed Upstream of the receiving water with a total phosphorus result of 0.265 mg/l.. Testing was preformed by outside certified lab using EPA Method 365.1.
3. Quarterly samples were taken during the same time period at Purdam drain into Mason creek which is down stream from Outfall 1; these samples had an average of 0.290 mg/l total phosphorus. Testing was preformed by outside certified lab using EPA Method 365.1.
4. Locations of sample points are Purdam Gulch Drain, Purdam Gulch Drain at Ustick Road & Sugar Factory, and Outfall 001 at re-aeration cascade 16200 Star Road.
5. **Report of findings.**
 - A. In the last 12 month period, from November 1, 2008 through October 29, 2009, the Sorrento Lactalis, Inc. wastewater treatment plant has discharged total phosphorus levels below the receiving water levels.
 - B. With the increase of Phosphorus between the two samples points there are other contributing sources of loading: aquaculture, agriculture, industrial, or other.
 - C. Sorrento Lactalis, Inc. has put considerable effort in to maximizing the performance of our current waste treatment equipment to achieve the Total phosphorus as P final effluent limit of 0.07mg/L which goes into effect on May 1, 2010. Several factors were identified that have hindered the Sorrento's waste treatment process from achieving the final Phosphorus limits.

A management team was established to resolve two re-occurring issues:

- ◆ The team identified high strength milk and clean in place (CIP) spills as one issue, and
- ◆ Excessive site production water use as another factor that could be improved upon.

In early January 2009, a project to install turbidity sensors with alarming capability in seven locations within the site's production areas was approved and funded at a cost of \$157,000. This project will limit the amount of high strength milk or chemical spills to the wastewater plant.

In conjunction with this monitoring and alarm system, a lined lagoon was installed this year at a cost of \$90,000 which will be used to receive high strength spills. Subsequently, when completed the off-spec stream can be treated over time by metering the effluent back to the waste treatment head works, thus reducing the impact to the treatment facility.

Other improvements have been put in to place to meet the May 2010 final phosphorus limits:

- ◆ Based on industry research for enhanced chemical treatment for phosphorus removal in May of this year, Sorrento evaluated and implemented the use of PolyAluminum Chloride (PAC) as a pretreatment chemical for our advanced sand filtration system.
- ◆ In early September an on-site meeting with Parkson Corporation took place to review and implement changes to our DYNASAND D2 Advanced filtration system. These changes included modifying the flow rate of the reject stream of the sand filter system to increase the removal of total suspended solids.
- ◆ Additionally, Symbiont, an outside engineering firm specializing in dairy waste treatment was contracted to conduct biological phosphate removal training and chemical phosphate removal training for all waste treatment operators, this training was completed in October 2009 and given by Dr. Jenchie Wang.
- ◆ Symbiont was also contracted to review our current waste treatment capabilities and develop a course of action for any future influent increases to the waste water treatment plant that will accompany increases in the Cheese Plant production. Multiple scenarios have been reviewed and all require a considerable upgrade potentially utilizing more advanced technology such as membrane technology for tertiary treatment which will further reduce our phosphate discharge.

We will continue to research any new technology and process enhancements for phosphorus removal to meet the May 2010 effluent limits.

- D. We continue to work with our chemical suppliers for alternative products to reduce the loading sent to the treatment plant and have reduced the use of phosphorus in our Cheese Plant sanitation chemicals to just 6% of what it was last year (i.e to 3% of the total phosphorus load).